Sustainable Agriculture Network/Rainforest Alliance

Monitoring & Evaluation System Public Report

April, 2015

Report prepared and submitted to the ISEAL Secretariat by the Sustainable Agriculture Network (SAN) and Rainforest Alliance (RA)

Table of Contents

1. Executive Summary

Over the past year the SAN/RA M&E System has made good advances in its continued path towards full compliance to the ISEAL Impacts Code. The fundamentals of the system remain strong with a sound theory of change and a corresponding tiered approach to monitoring and evaluation (performance monitoring and impact evaluation). Despite a recent decrease in the capacity of RA's Evaluation & Research (E&R) Program there remains a dedicated team, both in E&R and in the SAN Management Unit, to maintain and advance its development. Roles and responsibilities of key staff have been adjusted in order to remain responsive to needs and priorities over the coming year.

The most notable advances in the past year relate to data collection and quality control, and data management. In 2014, a SAN/RA technical team worked together on a set of protocols and accompanying guidelines to better embed the data requirements for both the Global Indicators and a subset of ISEAL's Common Indicators into the certification application and annual audit processes. The purpose was to mitigate previous views from Certification Bodies (CBs) and auditors that even the most basic data for monitoring and evaluation came at an additional cost and burden. Incorporating this data collection as part of the audit planning process has allowed us to meet the dual objective of improving the integrity of the audit process and gathering key information for system-wide monitoring and evaluation, all the while not increasing the time and cost of audits. In line with this has been changes in data management. Modifications have been made to the SAN Certificate Database (SCD) in order to store new data collected and verified through this audit planning and implementation. Operations currently certified are required to submit to CBs these new data requirements by June 2015. For new certificate applicants the requirements have been effective since February 2015. Starting FY2016, a more standardized and consistent approach to evaluating and reporting on the Global Indicators and ISEAL Common Indicators will begin.

Planned developments in the coming year include further building and fine-tuning quality control procedures into the audit planning and implementation processes and the SCD architecture. Also planned is the completion of custom, routine reports built into the SCD to more efficiently facilitate quarterly analytics and reporting on the indicators. Finally, 2015 will see the completion and publication of the first comprehensive annual SAN/RA M&E report.

2. Scope and Boundaries of the M&E System

Monitoring & Evaluation (M&E) capacity for the Sustainable Agriculture Network/Rainforest Alliance (SAN/RA) certification scheme is largely supported through Rainforest Alliance's (RA) Evaluation & Research (E&R) Unit. E&R's activities serve two principle purposes;

1. Designing and implementing (including training of implementing partners) survey tools for technical assistance projects to measure, document, analyze, and report sustainability levels pre-certification.
2. Designing and implementing (including training of auditors) survey tools for auditing to measure, document, analyze, and report sustainability levels post-certification.

The E&R Program has a global reach and focuses on many commodities in the agricultural sector. The current geographic scope of the program includes landscapes where RA and partners are implementing training and technical assistance activities to ensure producers are in compliance with the SAN standard. Technical assistance projects are currently underway in Kenya, China, India, Vietnam, Rwanda, Ghana, Peru, Ecuador, Cote D'Ivoire, Indonesia, Papua New Guinea, and Madagascar. The unit's reach also includes regions covered by the SAN Certification Bodies (http://www.ioas.org/xlistsan.pdf). It is the SAN Management Unit that sets the Accreditation Requirements and minimum auditing requirements through the Auditor Competence Program for the Certification Bodies (CBs).

The SAN/RA M&E approach focuses mainly on measuring sustainability impacts of producers/production units that are in compliance to the SAN standard's Principles and Criteria. This is its core role. However, the E&R Program also provides support to develop indicators and accompanying data collection methodologies for technical assistance strategies focused on achieving discrete sustainability goals as opposed to, or in addition to, compliance to the SAN standard. These goals include productivity, sustainable financing, and climate resiliency.

For both technical assistance and auditing, monitoring and evaluation activities focus on tracking on-farm results at both the production unit and the producer group/organization levels (including tea factories and coffee washing stations). For technical assistance projects, monitoring and evaluation approaches increasingly take into account off-farm, production landscape-level results such set aside areas for large producers and the impacts of smallholder producers on deforestation, forest degradation and biodiversity loss in and adjacent to protected areas. Evaluation approaches are also increasingly programmed to understand indirect results on communities.

The current scope of the SAN/RA M&E approach addresses all sustainability issues. The E&R Program has the right expertise to conceptually design an M&E approach that addresses SAN/RA's sustainability issues – biodiversity conservation and sustainable livelihoods. Table 1 describes this E&R's capacity in detail.

3. Roles and Responsibilities

The RA/SAN M&E System is developed and maintained by both staff in Rainforest Alliance's Evaluation & Research Program and staff in the SAN Management unit. In 2015, the main contact staff for the general public in regards to the overall SAN/RA M&E responsibilities will be William Crosse, RA's Deputy Director of Evaluation and Research (wcrosse@ra.org) and Ana Garzon, Manager of Operations for the SAN Management Unit. William Crosse's job description is provided as an Appendix (Appendix_1_WCrosse JD).

The E&R program consists of 7 staff (see Table.1). Since the last public systems report the program's capacity has reduced but the mandate of the program remains the same. Specifically, the program supports the mission of the Rainforest Alliance and the Sustainable Agriculture Network by:

- Building institutional and partner capacity to demonstrate results of programs and projects through Results-Based Management (RBM) systems, including support for programmatic and institutional Theories of Change, strategic planning, and monitoring and evaluation;
- Acquiring and synthesizing third party and internal data on the outputs, outcomes and impacts of RA activities, including best management practices promoting by the SAN, Forest Stewardship Council (FSC) and Sustainable Tourism Standards;
- Creating scientifically rigorous methodologies and data collection systems for evaluating livelihood and conservation results, and delivering training in the application of such methodologies at the field level;
- Participating in the development of an industry-wide data exchange standard, so that RA programs can compare data internally and RA can more easily leverage data on activities and impacts to external partners, including funding agencies;
- Advising private sector collaborators on supply chain sustainability strategies and the design of monitoring and evaluation systems;
- Facilitating prioritization exercises, including geographic mapping;
- Communicating results of projects to RA staff and key external stakeholders.

None of these 7 E&R staff members work exclusively on SAN/RA M&E activities. The program's scope of work is cast widely across the three major sectors that RA works on – agriculture, forestry, and tourism – and all staff interface with RA programs, corporate partners, external research partners, and other key stakeholders. Approximately 40% of the program's total operating budget is committed to developing and maintaining the SAN/RA M&E System.

That said, the SAN Management Unit has staff also focused on the SAN/RA M&E System. At a technical level, Ana Garzon, Manager of Operations, leads SAN's information management activities that bring farm and group level data into operational and strategic decisions for the benefit of the program and its stakeholders. Oliver Bach, Director of Standard & Policy, leads revisions of the SAN Principles and Criteria, including those that address farm and group level data collection and management. Conrado Guinea, Manager of Standards & Policy, leads development, revision, and execution of the SAN's

Accreditation Requirements to help clients meet key indicator data requirements, and Policy for CBs to conduct sufficient data quality control. Sylvia Rioja, Auditor Competence Manager, leads training of auditors and quality control of auditing to furnish data for monitoring, evaluation, and reporting purposes. Enzo Jimenez, Systems Analyst, leads design and configuration of the SAN Certificate Database (SCD) for manage data and supporting documentation requirements for M&E purposes. Finally, Andre Defreitas, SAN Director, provides leadership and oversight from the perspective of the SAN Management Unit.

In addition to these staff, the E&R program has also worked within consultants this past year to deliver in specific aspects of the SAN/RA M&E system. A collaboration with Wright State University led to the analysis of audit data to publish reports looking at non-conformities of Rainforest Alliance Certified tea and coffee producers to determine whether improvements were made and non-conformities addressed.

Table 1 lists all 7 full-time E&R staff including their titles, education, experience, and role(s) and, if any, in supporting SAN/RA M&E activities.

RAINFOREST ALLIANCE: FULL-TIME EVALUATION AND RESEARCH STAFF						
First Name	**Last Name**	**Title**	**Education**	**Experience**	**Role in SAN/RA M&E**	**% time dedicated to SAN/RA M&E**
William	Crosse	Deputy Director, Evaluation & Research	BSc Marine Geography, Cardiff University MSc Oceanography, Southampton University	**Years:** 10 **Functional:** Project design, budgeting, management, monitoring and evaluation **Thematic:** protection areas, fisheries management, biodiversity conservation policy, agricultural value chains, marine resource management **Geographic:** Indonesia, China, Ghana, Cote d'Ivoire, Ecuador, Mexico, Peru, Kenya, Rwanda, Uganda	• Technical Assistance M&E • Audit M&E • Global indicators • Sampled Monitoring Indicators and Methodologies	30%
Jeffrey	Milder	Director, Evaluation & Research	BA, Earth Sciences, Harvard University MSc, Natural Resources, Cornell University PhD, Natural Resources, Cornell University	**Years:** 17 **Functional:** ecological research, land-use planning, environmental impact assessment, policy and scenario assessment **Thematic:** landscape ecology, conservation in agricultural landscapes, conservation in metropolitan landscapes, agro-ecology, socio-ecological systems **Geographic:** United States, Central America, Colombia, Chile, Kenya, Tanzania, China	• Environmental Indicators • Focused research on the impacts of SAN/RA Certification • Sampled Monitoring Indicators and Methodologies	20%
David	Hughell	Research and Geospatial Analyst	BA Biology, University of California MS Natural Resource Mgt, California Humboldt State University PhD. Forest Mgt. North Carolina State University	**Years**: 22 **Functional**: Project design, implementation **Thematic**: Biodiversity; forest management; geospatial analysis; information management; certification; climate change. **Geographic**: Central America, South America, Mexico, West Africa, Asia, and Eastern Europe.	• Training clients and auditors on geospatial protocols	10%
Jessica	Grillo	Senior Manager of Social Science and Corporate Sustainability Assessment	BA Anthropology, Stony Brook University MA International Development and Social Change, Clark University	**Years:** 13 **Functional:** Livelihoods and food security research design, oversight, and implementation; monitoring systems design and management; decision and policy support; technical assistance and management **Thematic:** Livelihoods; food security; disaster risk reduction; climate vulnerability; early warning systems; social science **Geographic:** Central and South America, Southeast and Central Asia, Southern and East Africa, United States	• Livelihood Indicators • Focused research on the impacts of SAN/RA Certification • Sampled Monitoring Indicators and Methodologies • Corporate engagements	5%

Paul	Stanchfield	Project M&E Specialist	Master of International Public Affairs, University of Wisconsin-Madison, LaFollette School of Public Affairs, Madison. Bachelor of Arts, International Relations and Spanish, University of Wisconsin-Madison, Madison.	**Years: 6** **Functional:** Analysis & Logical Decision Making, Project Management, Environmental Management, STATA, Monitoring & Evaluation **Geographic:** South America, Mexico, Indonesia, West Africa	• Data Cleaning and Analysis • Learning and Adaptive Management	20%
Deanna	Newsom	Senior Analyst	BSc Biology, University of Victoria MSc Forest Policy, Auburn University	**Years:** 13 **Functional:** Project design and management, data analysis, science writing and communication, monitoring and evaluation **Thematic:** Biodiversity, forest management, water quality, certification **Geographic:** North America, Europe, Central America, Western Africa	• Data analysis • Dissemination and communication of results	5%
Elizabeth	Brown	E&R Program Associate	BA, Shepherd University	**Years:** 6 **Functional:** Project management, financial management, science writing and communication	No role	0%

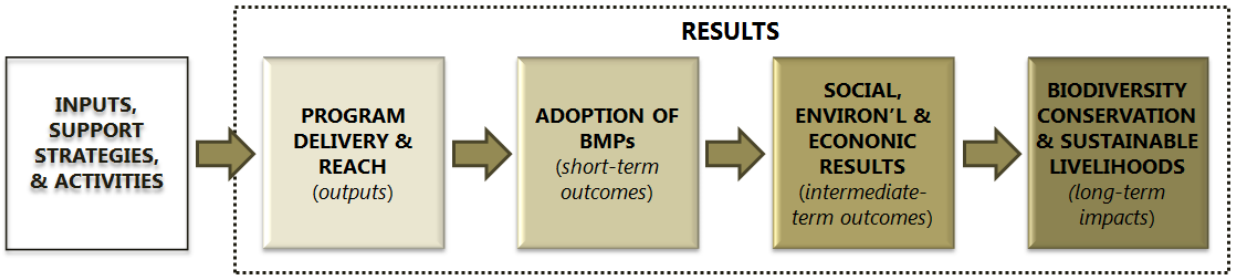
4. Cooperation and Coordination

The SAN/RA M&E System relies on a few partnerships and collaborations with other organizations (e.g. ISEAL members, producer groups, companies, researchers, NGOs, etc.). These are:

- Collaborations with local NGOs and Universities: For monitoring and evaluating technical assistance performance and compliance level pre-certification, the E&R unit collaborates with a number of local NGOs and Universities to collect and analyze production unit data. In Cote d'Ivoire, E&R has worked with a local NGO, CEFCA, to conduct internal inspections and farm smallholder cocoa farmers that are members of cooperatives applying for RA/SAN certification, Similarly, in Indonesia, E&R has trained and managed students from Makassar University to administer semi-structured survey approaches to quantify practice adoption and outcome level pre-certification status.
- Collaboration with Wright State University to mine certification audit reports for an analysis on non-conformities as an indicator of improved management on certified tea and coffee operations.
- Collaboration with ISEAL on the collective reporting initiative to align ISEAL's common indicators with SAN/RA's Global Indicator and Sampled Monitoring Indicators. A sub-set of ISEAL common indicators have ben embedded into the SAN certification client application process.
- Collaboration in working groups facilitated by the Sustainable Food Lab (SFL) to advance common indicators and methods for livelihoods and environmental performance measurement. E&R staff contributed perspectives to improve a "common approaches" document meant to provide guidance to corporate collaborators on best practices in designing performance measurement systems and selecting indicators and metrics.
- Collaboration with leading researchers at the International Congress for Conservation Biology in July 2013, a day-long workshop to discuss the growing "evaluation gap" in understanding conservation outcomes and impacts of agricultural sustainability standards. In 2014, a paper titled "An agenda for assessing and improving conservation impacts of sustainability standards in tropical agriculture" was published in Conservation biology. Rainforest Alliance's Jeff Milder was lead author.

5. Defining the Intended Change

A first version of SAN/RA's intended change (termed 'Theory of Change' hereafter) was formally adopted by the SAN Board in March 2013. However, recent revisions have been made and these are reflected in this section. This updated SAN/RA Theory of Change can be found as an appendix (Appendix 2_Introduction to the SAN-RA system and Theory of Change (Feb 2015) and SAN/RA's definition of Theory of Change can be found in the appendix document titled 'Appendix_3_ER_Glossary_april2013. **Figure 1** below shows the four levels of results sought by SAN/RA under the intended change.



The mission of the Sustainable Agriculture Network is to be a global network transforming agriculture into a sustainable activity. By carrying out this mission, the SAN and its members and partners aim to achieve their long-term vision: a world where agriculture contributes to the conservation of biodiversity and sustainable livelihoods.

5.1 Intended long-term social, environmental or economic impacts.

SAN and RA's shared long term impact is to transform farming landscapes toward long-term sustainability. Sustainable, resilient rural landscapes are those that conserve native biodiversity and ecosystem services; produce crops and livestock efficiently and profitably; equitably improve livelihoods for local communities; and are managed such that they can adapt effectively to changing conditions.

5.2 Expected short and medium term outcomes.

5.2.1 Medium term outcomes

5.2.1.1 Biodiversity conservation

Biodiversity conservation has always been a central focus of the SAN's work. Farms not only protect on-site conservation values (e.g., by conserving existing natural ecosystems and restoring native vegetation) but also support conservation at a landscape level by maintaining wildlife corridors and supporting management objectives of nearby protected areas. The SAN standard also helps protect endangered species and conserve all native flora and fauna.

5.2.1.2 Natural resource conservation

Agriculture cannot be sustainable if it diminishes the essential natural resources that are the basis of a productive farm, including soils, water, and native species supporting pollination and pest control functions. Key SAN outcomes include maintaining and improving soil health, reducing erosion, avoiding water pollution, and using water in an efficient manner that leaves ample water resources to support nearby communities and ecosystems. By sustaining key natural resources, farms reduce their input costs and become less susceptible to droughts, pest outbreaks, and climate change. Finally, farms' increased tree cover, improved soil health, and reduce input use all contribute to reducing greenhouse gas emissions and making sustainable farms part of the climate change solution. Together, these outcomes strongly support "climate-smart agriculture" that improves farm performance for both climate change adaptation and mitigation.

5.2.1.3 Improved Productivity and Profitability of Farms

A central objective of the SAN's work is to support farmers in their efforts to increase the productivity, efficiency, and profitability of their farms – ensuring that agriculture remains a rewarding activity for generations to come. Key SAN outcomes include increased productivity at a whole-farm level – including cash crops, food crops, livestock, and tree and forest products – as well as improved product quality of cash crops. The efficiency by which farms use land, water, fertilizers, and labor can vary dramatically with a given region. By supporting more robust farm management systems, business management practices, and natural resource management, the SAN system helps close this "efficiency gap" so that farmers can save money on inputs while also protecting the environment.

5.2.1.4 Livelihoods of farmers, workers, and their families

A decent standard of living is achieved when farmers, workers, and their families have adequate resources for food, housing, clean water, health care, education, transport, clothing, and savings. Improving livelihoods toward such a "living wage" or "living income" level is a core SAN objective. This outcome is promoted through a range of Standard requirements and through the work of SAN members to leverage additional investment in support of key livelihood needs. Additionally, the SAN ensures that the rights of workers and minors are protected, in accordance with key international norms such as the conventions of the International Labor Organization. Where small-scale farmers are organized into groups, these group structures support their members to improve their livelihoods through transparent governance and effective management of crop marketing, training, and other functions.

5.2.2 Short –term outcomes

Under the joint SAN/RA Theory of Change, short-term outcomes are the adoption of best management practices promoted under the SAN standard that are a common consequence of reaching producers for training, technical assistance, and auditing.

5.3 Organization strategies

SAN/RA support strategies seek to alleviate or mitigate threats to desired biodiversity conservation and sustainable livelihoods impacts and exploit potential opportunities by modifying the behavior of key actors engaging in agricultural commodity value chains. Key actors targeted by SAN/RA strategies include agricultural producers, civil society groups, commodity trading, processing, and retailing businesses, consumers, communities, and governments.

5.3.1 Strategies for Agricultural Producers

SAN/RA seeks to modify the behavior of agricultural producers by promoting, supporting, and ensuring the consistent adoption by agricultural producers of best management practices promoted under the SAN Standard. SAN/RA strives to develop a credible standards and certification system by implementing the following strategies:

- Developing sustainable agriculture standards with SAN stakeholders.
- Developing accreditation policies and providing guidance on requirements for Certification Bodies (CBs).
- Developing Farm/Group policies with SAN stakeholders.
- Developing SAN auditor training requirements.

SAN/RA also seeks to help producers supply sustainable products by implementing the following strategies:

- Facilitating producers' access to investment and working capital.
- Building capacity among smallholders and large-holders to adopt Best Management Practices (BMPs) promoted under the SAN Standard
- Facilitating communication on SAN Standard/BMPs adoption between members within supply chain networks.

Finally, SAN/RA ensures continued application of best management practices by providing quality and cost-effective certification, verification, and validation services.

5.3.2 Strategies for Civil Society Groups

SAN/RA seeks to change the behavior of civil society groups by pursuing the endorsement and active promotion of the SAN Standard by these groups. SAN/RA works to build strategic alliances with civil society groups for promoting sustainable agriculture, and, in turn, encourages governments to adopt policy measures supporting sustainable agriculture in national and sub-national development strategies and programs.

5.3.3 Strategies for Commodity Trading, Processing, and Retail Businesses

SAN/RA seeks to modify the behavior of commodity trading, processing, and retailing businesses by enabling these businesses to embed sustainability in sourcing and marketing strategies and support their efforts to develop new sustainable supply chain linkages. SAN/RA makes the business case for sustainability with industry leaders and provides business advisory services facilitating the implementation process.

In addition, RA supports the process by issuing license agreements, approving seal use and providing guidance on use of seal requirements. SAN/RA further supports the development of market linkages by creating transparent supply chains for sustainable products. Specifically, SAN/RA seeks to ensure supply chain transparency by implementing the following strategies:

- Developing Chain of Custody (CoC) standards
- Providing quality and cost-effective certification, verification, and validation services on the basis of the SAN/RA COC standards
- Developing comprehensive traceability platforms assuring sustainable sourcing as well as businesses' compliance with the participation/royalty agreements supporting the system.

5.3.4 Strategies for Consumers

SAN/RA seeks to modify the behavior of consumers by raising their awareness of sustainability concerns and possible change options. SAN/RA seeks to educate and enable consumers to make sustainable choices primarily through the marketing strategies of committed businesses.

5.3.5 Strategies for Communities

SAN/RA seeks to modify the behavior of communities in developed countries by improving knowledge, skills, and values supporting sustainability. SAN/RA works to integrate sustainability learning tools and methods into local education systems in developed countries.

5.3.6 Strategies for Governments

SAN/RA, in cooperation with other civil society groups, works with governments to adopt policy measures that mainstream sustainable agriculture in national and sub-national development and procurement strategies.

5.4 Unintended effects

Under the SAN/RA Theory of Change, a number of positive and negative unintended results have been identified. Among the possible unintended positive socio-economic outcomes identified in the Theory of Change, the SAN/RA system may contribute to greater farmer pride and confidence thanks to outcomes generated by adopting best management practices. These outcomes include improvements in farms' management capacity, and their ability to provide better educational and employment opportunities to their families as a result of higher household incomes. Smallholder households benefiting from support

strategies may also experience improved food security through increased household income and productivity of food crops. Non-agricultural sector growth and employment may also be generated as a result of the local sourcing criteria built into the SAN Standard. Furthermore, access to education and health services may increase the educational attainment and health status of children in smallholder households - provided these services are of sufficient quality. In the long-term, such human capital improvements could broaden the employment and earning opportunities for young people in rural areas.

Among the possible negative unintended results is agricultural intensification possibly reducing on-farm biodiversity and increasing households' vulnerability to different shocks (e.g. climate and market shocks). Conversely, compliance to protection, conservation, and restoration SAN criteria may hinder farms' productivity and profitability. Positive livelihoods impacts may create new direct and indirect threats to biodiversity conservation when efforts to increase profitability are not compulsory or conditionally linked to the mitigation of destructive activities (e.g. through regulation or payments for ecosystem services). Finally, while adoption of best management practices may improve food security among participating smallholders, non-participating households that are net food consumers may experience food insecurity due to increased local prices for food crops.

5.5 External factors

There is a broad range of factors that may influence the ability of the SAN/RA programme to reach target producers and achieve outcomes and desired impacts. **Table 2** is a list of key influencing factors currently identified under the joint SAN/RA Theory of Change.

INFLUENCING FACTORS	LEVEL AND TYPE OF RESULTS					
	Outputs	Short-term outcomes	Medium-term outcomes			Desired impacts
	Reach	BMP Adoption	Environmental Outcomes	Economic Outcomes	Social Outcomes	Sustainable, resilient rural landscapes
National governments trade and investment policies	X	X	X	X	X	X
Certification cost and scheme complexity	X	X				
Upward price trends in international and local commodity markets	X	X		X	X	X
Market competitiveness diluting premium prices	X	X	X	X	X	X
Competing government and industry sustainability standards	X					
Political instability or conflict	X	X	X	X	X	X
Sourcing preferences and risk tolerance of buyers and group administrators	X	X	X			X
Climatic shocks and	X	X	X	X	X	X

other natural disasters						
Unsustainable land use practices in vicinity of SAN/RA program areas			X			X
Access to reliable markets	X			X	X	X
Access to quality inputs		X	X	X		
Social capital among communities	X	X	X	X	X	X
Equitable and secure property rights and land tenure regimes	X	X		X	X	X
Sound public governance practices				X	X	X
Quality public health and education services (including literacy, family planning, and nutrition)				X	X	X
Effective social safety nets				X	X	X
Broad-based national human rights and gender equality policies	X	X		X	X	X

6 Performance Monitoring

The overall goal of the SAN/RA M&E approach is to track progress towards outputs, outcomes, and impacts, and evaluate the causal relationships among these levels to understand overall effectiveness of the SAN/RA system in conserving biodiversity and improving livelihoods. However, due to inherent tradeoffs among indicator cost, scope, detail, and accuracy, there is no single set of indicators that can test and validate SAN/RA's Theory of Change across the entire SAN/RA portfolio. For instance, outcome and impact indicators that are needed to evaluate the medium- and long-term effects of certification are usually too costly to apply across all production units, or may require specialized research designs. On the other hand, indicators on program delivery, reach (outputs), and best management practice adoption are informative and may be feasible to collect for all production units, but are not capable of attributing desired outcomes and impacts to certification. With this in mind, RA's E&R Program developed a three-tiered M&E System (the "pyramid"; Figure 2) to provide the full depth, breadth, and scope required to look at SAN/RA's Theory of Change.

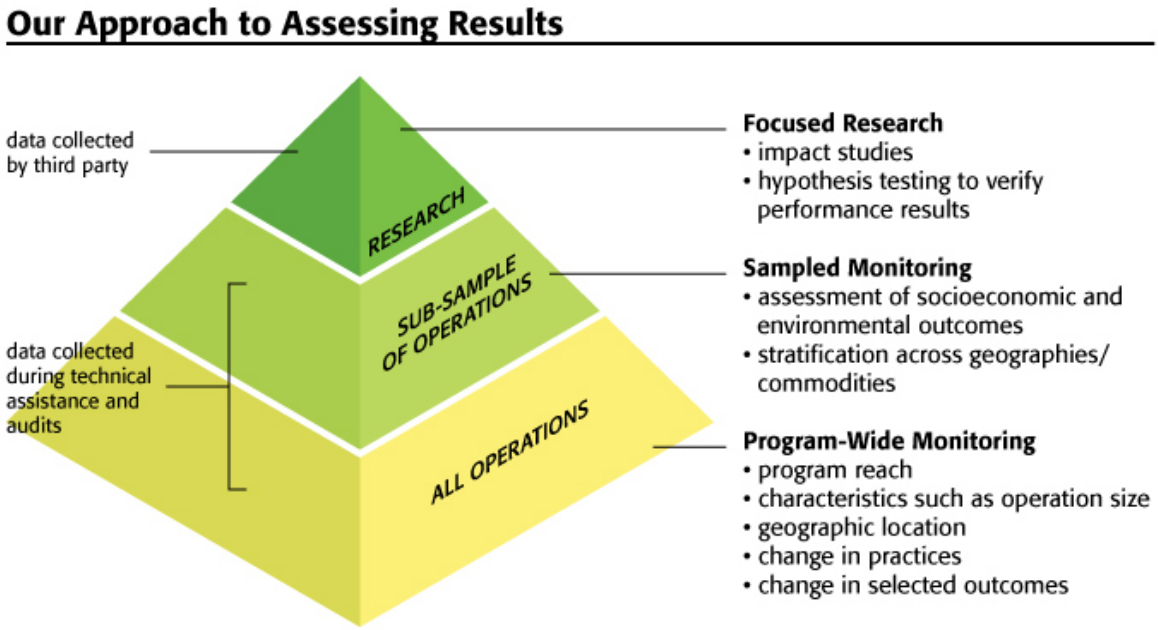


Figure 2: M&E pyramid indicating the three levels at which monitoring and impact assessment are conducted

5.1 Indicators

5.1.1 Program-wide indicators

The bottom level of the pyramid is the **Global Indicators**. These indicators are measured across all certificates, and, to the extent possible, are applied and tabulated in a standard way across commodities and geographies for high level reporting and management decision making. These indicators focus on certification performance in terms of program delivery, reach, and best management practice adoption and have been selected based on the following criteria:

1) **Thematically appropriate:** Indicators should measure important results that we intend to influence through our sustainability standards, certification, and training. The SAN/RA Theory of Change provides the necessary conceptual framework for identifying such indicators.

2) **Relevant and useful:** Indicators should provide critical information for informing internal decision-making (e.g., strategic planning and adaptive management) and communication of "headline" results to key stakeholders and partners.

3) **Technically sound:** Indicators should be clearly defined and measured using data that we will be able to collect in a standardized, accurate, and externally credible manner.

4) **Sensitive:** Indicators should respond in a timely fashion to changes that are likely to result from SAN/RA activities.

5) **Affordable:** Indicators can be monitored cost-effectively within the context of SAN/RA's audit and technical assistance activities.

Table 3 lists the set of Global Indicators embedded in auditing activities and are now fully operational.

Key Strategic Theme	Theory of Change	Results Level	Global Indicator	Disaggregated by
Scale/Targeting	Output	Program delivery/Reach	Number of individual producers and businesses trained in Best Management Practices (BMPs)	Certification Status Type of Beneficiary Type of Training Service provider Location Gender Type of BMP
Scale/Targeting	Output	Program delivery/Reach	Number of group organizations trained in BMPs	Certification Status Type of Beneficiary Type of Training Service provider Location Type of BMP
Scale/Targeting	Output	Program delivery/Reach	Land area under sustainable management	Location
Biodiversity	Short-Term Outcome	Environmental Sustainability	Land area designated for conservation management	Certification Status Location Type of land area (Land under restoration management, HCV Land, Land under Strict Preservation)
Improved Management	Short-term Outcome	Environmental, Economic, Social Sustainability	% compliance to SAN standard Principles and Criteria (Improved Management Index)	Certification Status Location
Market Access	Medium-Term Outcome	Economic Sustainability	Quantity of sustainable goods and services produced	Certification Status Location
Market Access	Medium-Term Outcome	Economic Sustainability	Quantity of sustainable goods and services sold	Certification Status Location
Equity	Medium-Term Outcome	Social Sustainability	Number of workers with access to equitable pay, basic rights, and social benefits	Certification Status Location Gender Employment Status Origin

The E&R Program, in collaboration with the SAN Management Unit, continues to develop an "Improved Management Index" (IMI) as part of this program-wide indicator set. This quantitative index will use compliance data, collected through audits, to track change in management practices among SAN/RA certificate holders in key areas such as agronomy best practices, input use, soil and water management, vegetation management, wages, and worker conditions. IMI data will enable in-depth analysis and trend assessment regarding the ways in which the SAN Standard is driving substantive change on the ground. These data will be useful in their own right, and will also provide a robust characterization of SAN/RA "interventions," against which outcome- and impact-level results can be evaluated. Field protocols have been standardized for auditing to ensure data are comparable over time (pre-and post-certification). Thus, SAN/RA is modifying both internal inspection and external audit protocols such that a single checklist-type tool effectively serves the dual purposes of compliance verification and monitoring and evaluating improved management, with little additional effort on the part of field technicians and auditors. The SAN Management Unit has developed improved guidance and audit checklists for auditors to administer this more systematic approach (for more detailed see section 9). Changes to the SAN Certificate Database have also been made to better manage group-level compliance scores for improved management analysis and reporting.

The middle level of the pyramid consists of **Sampled Monitoring (SM)**. The main purpose of this level is to provide more rigorous and detailed information focusing on medium-term social, environmental, and economic outcomes, as well as track unintended effects of RA/SAN certification. SM is intended to be conducted on a subset of certified production units that are representative of the range of geographies, crop/forest types, and contexts (e.g., plantation vs. smallholder group) in which SAN/RA works. As with the Global Indicators, the SM indicators are monitored systematically and indefinitely to reveal change over time, including slow-moving changes (e.g., forest restoration) and cumulative results (e.g., changes in livelihoods assets). Periods between assessments for SM indicators varies depending on sensitivity to change and cost. Typically, SM would be thematically comprehensive, including assessments of selected social, economic, and environmental outcomes and analyses of the ways in which these outcomes relate to SAN standard compliance over time. Currently, SM exceeds the scope of what can be collected through routine technical assistance and audits; thus, data is typically collected by trained in-country field staff, consultants, local universities, or community-based groups, following standard protocols development and tested by the E&R team. This comes at a cost and the only current means of funding is through grant funded projects. With further field experience, however, we are beginning to better understand the potential of mainstreaming this more complex monitoring and verification into auditing. We continue to explore a concept we call "Audit+," where highly skilled auditors are incentivized to increase the time and scope of an audit in order to gather data for monitoring and verifying status and change against medium-term outcomes defined in the SAN/RA theory of change.

Table 4 shows SM indicators that relate to SAN/RA interventions and have been programmed for or piloted in technical assistance projects. An example methodology, the Natural Ecosystem Assessment, is provided as an Appendix (Appendix_4a_NeaBaseline-12Jan14, Appendix_4b_Bantaeng NEA methodology & Appendix_4c_Bantaeng NEA preliminary results (2013-06-25).

Strategic Theme	Theory of Change Results Level		SM Indicator
Conservation: habitat condition	Medium-term Outcomes	Environmental Sustainability	% tree cover
Conservation: habitat condition	Medium-term Outcomes	Environmental Sustainability	Vegetation structural diversity
Conservation: habitat condition	Medium-term Outcomes	Environmental Sustainability	Plant functional type diversity
Conservation: habitat condition	Medium-term Outcomes	Environmental Sustainability	Abundance of small-scale habitat elements
Conservation: Ecosystem services (water)	Medium-term Outcomes	Environmental Sustainability	Water quality in water bodies on or near production or business unit
Livelihoods: Financial Assets	Medium-term Outcomes	Economic Sustainability	Productivity (kg/hectare)
Livelihoods: Financial Assets	Medium-term Outcomes	Economic Sustainability	Net-income
Livelihoods: Social Assets	Medium-term Outcomes	Economic Sustainability	Rating of the stability of relations with buyers
Livelihoods: Social Assets	Medium-term Outcomes	Social Sustainability	Increased participation in decision-making

The apex of the pyramid is **Focused Research (FR)**, comprising individual studies, often conducted by third-party scientists that focus on outcome and impact evaluations. Although the entire SAN/RA M&E approach is, in essence, testing the hypotheses represented by the Theory of Change, the FR level uses rigorous research designs to evaluate specific hypothesized pathways within the TOCs. Such designs are helpful for attributing observed results to specific practices or interventions. The FR tier also includes studies evaluating linkages between outcomes and impacts—that is, the long-term, large-scale, cumulative, or indirect effects of SAN Certification (e.g., on watershed health, landscape connectivity, or poverty reduction).

The three levels of the pyramid will complement one another to provide an overall portrait of results that is both comprehensive and rigorous. For instance, the SM and FR levels focus on characterizing the relationships between best management practices, outcomes, and impacts. With solid understanding of these relationships, data on program reach and best management practice adoption—collected program-wide—may be more credibly used as proxies for outcomes or even impacts.

Currently, Global Indicators are not published on the RA or SAN websites. However, in December 2013 RA published a document entitled “Charting Transitions to Conservation-Friendly Agriculture” (Appendix_5_ Charting transitions to conservation-friendly ag) that describes the approach to

monitoring environmental results at the Sampled Monitoring level. This document is also available via RA's website (http://www.rainforest-alliance.org/publications/conservation-friendly-agriculture-report).

Collection and recording of monitoring data through technical assistance is dependent on project funding and field capacity, and this varies country by country. Frequency of data collection is usually annual and the performance monitoring plan includes all SAN/RA Program-Wide Indicators and selected Sampled Monitoring Indicators. These are chosen depending on the specific project goals and donor requirements. Currently SAN/RA has M&E capacity in Ghana, Peru, Ecuador, Cote d'Ivoire, Indonesia, Rwanda, and Kenya to facilitate data collection, and baselines have been established for donor-funded technical assistance projects in Ghana & Cote d'Ivoire, Rwanda, Peru, Kenya, and Indonesia. Where SAN/RA does have field presence, a train the trainers approach is typically employed. RA and partners are trained on farm data collection protocols, and in turn they provide training and close support to cooperative technicians or lead farmers who are regularly reaching producers to conduct farm visits/inspections. One example is RA's Global Environment Facility (GEF) Sustainable Cocoa Project in Bia-Juabeso, Ghana. In 2013, RA staff in Ghana trained 62 lead farmers to map the boundaries of 1400 cocoa farms currently receiving technical assistance on the SAN standard. Data on farm and household characteristics and best management practice adoption were also collected using an internal inspection survey tool. This activity generated data useful for the Internal Management System (IMS). It also allowed lead farmers to provide an immediate farm area calculation to producers, which provides a strong incentive for them to remain engaged in the technical assistance program and future certification. In 2016 a follow-up assessment will be conducted to quantify changes in practice adoption and key outcomes. This survey instrument is provided as an Appendix (Appendix_6_Internal inspection Form - Juabeso-Ghana).

Current collection and recording of monitoring data through auditing occurs when new certificates are issued and subsequently updated through annual audits. This is a major advancement from last year. Data requirements for both the Global Indicators outlined in Table.1 and ISEAL's common indicator set are embedded in the certification client application process (For the list of current ISEAL common indicators which have data requirements met see Appendix (Appendix_7_Global Indicators and ISEAL Common Indicators for SAN_RA M&E System). This form, and the accompanying guidance, specifies what SAN-accredited certification bodies (CBs) are required to collect from clients as part of the audit planning process. Its purpose is to improve the integrity of the audit process and overall effectiveness of the SAN system by ensuring that key information about certified producers is consistently and accurately collected and verified. SAN accredited CBs must require all current and prospective certification clients provide the information indicated in this document prior to each certification audit (year 1 of the three-year SAN audit cycle) and prior to each annual audit (years 2 and 3 of the three-year SAN audit cycle). These forms (farms, groups, cattle certification), along with the client guidance are provided in the Appendix (Appendix 8a-8f).

Monthly SAN Certification Reports continue to be prepared and disseminated by the SAN Management Unit. These reports publish results for a subset of the program-wide indicators, including those aligned

with ISEAL's common indicator set. They include, 1) by certification body: Certificates, production hectares and total hectares, 2) by country: Certificates, production hectares and total hectares, and 3) by crop: Production hectares, volume, operations, and certificates. Certain indicator data are also included in the public summaries of certification audit reports. See following link to most recent report (http://apps.san.ag/scd_reports/).

Other key changes in the SAN/RA monitoring system have also been made to improve data comprehensiveness, completeness, and quality, but these workstreams remain ongoing given their complexity and need for multi-stakeholder participation. These are:

- SAN Standard revision to strengthen language under Farm and Group Management Principles to improve how Farm Management Systems and Internal Management Systems (IMS) collect and manage data requirements for Global Indicators and Sampled Monitoring (SM) Indicators. The SAN standard is currently going through a revision process which includes improved compliance criteria related to key data requirements, as well as even closer alignment of the SAN/RA Theory of Change and Standard.

- SAN Accreditation Requirements to improve the type and quality of data submitted by clients in their application for certification and how this data is stored for analytics and reporting. Current Accreditation Requirements are provided as an Appendix (Appendix_9_SAN-R-1-1_3 Accreditation Requirements for Certification Bodies). These requirements are in the process of being updated for roll-out in June 2015.

- SAN Auditor Competence Program to set the minimum standardized training package and data collection and verification requirements for auditors.

7 Data Management

To analyze and evaluate data furnished through both technical assistance and auditing requires a data management platform to facilitate important human and technological processes. There is no SAN/RA-wide data management platform to centralize and aggregate technical assistance monitoring results in a consistent and systematic manner so currently analysis and data management is done on a project by project basis using excel tools (e.g. Pivot Table) and the statistical program STATA. An IT solution for project monitoring and reporting continues to be explored, as well as funding opportunities for design and maintenance.

For auditing, since the last SAN/RA public systems report significant changes have been made to the SAN Certificate Database (SCD) to manage new information furnished through the client application and audit processes. This information includes the data requirements for reporting on the global indicators, a subset of ISEAL Common Indicators. This was launched in February 2015 and all CBs are required to work with their certification clients by June 2015 to submit/update data for these new fields. Once an initial engagement or audit is complete the Certification Body (CBs) is responsible for verifying the integrity of the data before uploading it into the SCD as a new engagement record. This engagement

record is time stamped to enable future time-series analysis and reporting by the SAN Management Unit and RA's Evaluation & Research Unit. Customized reports have been designed to extract the appropriate data for analytics and dashboarding of results on a quarterly basis. The SAN/RA data guidelines outlining these new SCD data fields are provided as an Appendix (Appendix_10_SAN-R-2-2 Data Guidelines Field Definitions).

8 Outcome and impact evaluation

The E&R Program invests in targeted, in-depth studies to test specific hypotheses related to the SAN/RA Theory of Change and to assess broader impacts of certification. This falls under Focused Research (FR) in Figure 2. Most impact evaluations are conducted by third-party researchers and partners, both because of in-house capacity limitations and to increase the perception of objectivity in how SAN/RA evaluates its effectiveness. Indicator and methodologies for outcome and impact evaluation are not standardized and nor should they be. Methodologies for evaluating livelihoods and biodiversity outcomes and impacts include both quantitative and qualitative (including participatory) approaches. Each approach depends on the study design and evaluation questions and is usually the prerogative of the researcher/partner contracted to conduct the study. The target frequency for such studies will depend on the hypothesis and the sensitivity of chosen indicators. Typically, the frequency will amount to 1-2 years for evaluating farm/group management performance, crop and farm productivity, and product quality, 2-3 years for evaluating changes in household livelihood assets and social equity, 3-5 years for evaluating changes in household resiliency, and 5+ years for evaluating land-use changes such as deforestation and forest degradation and agricultural expansion.

The E&R Program continues to advance the development of a comprehensive research strategy that will identify priorities for the Focused Research level as well as research questions that will be addressed using data generated by Program-wide Indicators, and through the Sampled Monitoring Framework. This plan will guide SAN/RA in pro-actively seeking out research partners.

Table. 5 lists the most notable evaluations supported by SAN/RA since 2011. A full list of impacts research projects and publication can be found at http://www.rainforest-alliance.org/work/impact/research and http://www.san.ag/biblioteca/biblioteca.php?cat=6

Title	Description	Location	Who
Impact of Cocoa Intensification Best Management Practices on Household Livelihood Systems (In Progress)	This study will evaluate the impact of cocoa best management practices on household livelihoods using the Household Economy Approach (HEA) livelihoods-based methodology.	Indonesia	Third-Party researchers commissioned by SAN/RA
The Role of Shade Trees in Watershed Conservation in Coffee Agro-forestry	A University of Georgia researcher is identifying the optimal shade-tree density around coffee farms for aquatic ecosystem protection and	Costa Rica	Third-Party Researchers commissioned by SAN/RA

Landscapes (In Progress)	creating guidelines to improve certification program standards and Payment for Environmental Services (PES) systems.		
Farmer Bankability and Sustainable Finance: Farm-Level Metrics that Matter	Researchers commissioned by the Rainforest Alliance compared financial recordkeeping variables between Rainforest Alliance Certified farms and noncertified farms; they also surveyed social lenders and local, in-country financial institutions. The study established a common minimum set of metrics for producers to record/report in order to apply for credit; showed that certified producers are better at tracking financial metrics; demonstrated that certified producers have better access to credit; and confirmed that although lenders prefer to lend to small and medium-sized enterprises, they also value farm-level metrics.	Colombia, Peru	Third-Party Researchers commissioned by SAN/RA
Monitoring & Evaluation of the Impact of Training Modalities for Sustainable Tea Production: Rainforest Alliance Training and Certification and Farmer Field School Training	Researchers from Wageningen University found that tea farmers who received Rainforest Alliance training applied environmental best practices significantly more often than an untrained control group and experienced better leaf quality.	Kenya	Third-Party Researchers not commissioned by SAN/RA
Côte D'Ivoire Cocoa: COSA Survey of Rainforest Alliance Certified Farms	In 2009 and 2011, COSA scientists collected data from Rainforest Alliance Certified and noncertified cocoa farms. They report that certified farms experienced higher productivity than the control group, higher net income and fewer signs of stream erosion, among other findings.	Côte D'Ivoire	Third-Party Researchers commissioned by SAN/RA
Impacts of SAN Certification on Water Quality, Soil Invertebrates, Farmer Livelihoods and Arboreal Mammals on Coffee Farms in Colombi*a*	The report summarizes the results of four studies conducted by Cenicafe, a Colombian coffee research institute. Streams were found to be healthier on certified farms, and certified farmers implemented a variety of Best Management Practices at a higher rate than their noncertified neighbors.	Colombia	Third-Party Researchers commissioned by SAN/RA
Improving Practices, Changing Lives: An analysis of tea certification audit reports from Malawi,	An examination of audit reports from 19 Rainforest Alliance Certified tea producers in East Africa that analyzes each producer's initial set of non-conformities through subsequent	Malawi, Tanzania, Rwanda	Conducted by SA/RA Evaluation & Research staff

Rwanda and Tanzania	audits to determine whether improvements were made and non-conformities addressed		
Sustainable Coffee Farming: Improving Income and Social Conditions, Protecting Water, Soil and Forests	An overview of scientific research examining the results of Rainforest Alliance coffee certification and training on ecosystems, livelihoods and communities.	Global	Conducted by SAN/RA Evaluation & Research staff
An Evaluation of Forest Cover on Rainforest Alliance Certified and Noncertified Coffee Farms in Aratoca Municipality, Santander, Colombia	Researchers from the University of the Andes in Colombia used spot satellite imagery to map forest cover within the coffee production landscape. They compared Rainforest Alliance Certified and noncertified coffee farms, and analyzed forest-cover fragmentation. Since most farms in the region grow coffee under shade, forest cover was found to play an important role in the degree of connectivity in the landscape.	Colombia	Conducted by third-party researchers

9 Improving the Effectiveness of the M&E System

Efforts to use monitoring and evaluation results for internal discussion and learning have thus far focused on ensuring better dissemination of evaluation and research results to RA staff and using geospatial analysis to reconcile market and landscape objectives and target new or expand existing project activities. Institutionalizing good adaptive management requires establishing the appropriate data infrastructures for entry, storage, management, and analysis of data sets. This is now in place in the form of the SAN Certificate Database (SCD). Customized reporting will now enable us to conduct routine analytics on a quarterly basis to evaluate and report on the Global Indicators as well as a subset of ISEAL Common Indicators. This quarterly reporting will begin in June 2015 once all certification clients have submitted their most recent data.

E&R currently shares the most recent and newsworthy evaluation results with RA's Communications program every month via an email called "News you can Use." Staff webinars are also offered on various topics, including revisions to the SA/RA Theory of Change and recent findings from our impacts research portfolio. Furthermore, in 2015 SAN/RA plans to publish its first comprehensive SAN/RA M&E report for both internal and external dissemination.

For funded projects, baseline monitoring data have been used to customize training and technical assistance programs. For example, in Central Sulawesi, Indonesia, Rainforest Alliance is providing

training on the SAN Standard to 1800 cocoa smallholder producers with funds from the Ford Foundation. The E&R Program has partnered with Hassanudin University in Makassar to collect baseline data all training beneficiaries. The objective is to establish a pre-technical assistance baseline for annual monitoring to continually evaluate performance of training and technical assistance on sustainable management, but they are also being used to design and tailor training activities based on where producers live (relative to important market, bio-physical conditions etc.) and their socio-economic status. Additionally, in Kenya, baseline data collected during internal inspections for 6 tea factories has been analyzed and presented back to factory managers and the Kenya Tea Development Agency (KTDA). These baseline findings will be used to advise Internal Management Systems (IMS) on continuous improvement needs to achieve/maintain levels of SAN compliance for certification. High level results are included as an Appendix (Appendix_11_Unilever Tea_Kenya_Stata_v3)

10. **Publicly Available Information about the M&E System**

- The SAN/RA point of contacts for comments, questions, or complaints about the M&E system are William Crosse in RA's Evaluation and Research Program (http://www.rainforest-alliance.org/about/contact), and Ana Garzon, Manager of Operations for the SAN Management Unit (http://san.ag/web/about-us/our-staff-2/).
- Details on the scope and boundaries of the SAN/RA M&E system can be found on the Rainforest Alliance website at http://www.rainforest-alliance.org/work/impact
- An explanation of the SAN/RA strategies, intended outcomes and impacts, and the most significant unintended effects can be found in the first ISEAL public systems report published on the Rainforest Alliance website at http://www.rainforest-alliance.org/work/impact/research. The full Theory of Change will not be formally published on the SAN/RA website until revisions are complete and approved by the SAN board this year.
- A list of completed, ongoing, and planned outcome and impact evaluations can be found on the Rainforest Alliance website at http://www.rainforest-alliance.org/work/impact/research and the SAN website at http://www.san.ag/biblioteca/biblioteca.php?cat=6. These web pages also include summaries as well as links to all outcome and impact evaluation reports.
- Monthly Certification reports publishing results for a subset of the program-wide indicators, including those aligned with ISEAL's common indicator set can be found at the following link (http://apps.san.ag/scd_reports/).